

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A purified polypeptide immunogen consisting of either (a) an amino acid sequence at least ~~[[94%]]~~ 99% identical to SEQ ID NO: 3, or (b) a fragment of said amino acid sequence at least ~~[[94%]]~~ 99% identical to SEQ ID NO: 3, wherein said fragment comprises an amino acid sequence at least ~~[[94%]]~~ 99% identical to SEQ ID NO: 1; wherein said polypeptide immunogen provides protective immunity against *S. aureus*.

Claims 2-3 (canceled):

Claim 4 (currently amended): The polypeptide immunogen of claim 1, wherein said polypeptide immunogen consists of an amino acid sequence at least ~~[[94%]]~~ 99% identical to SEQ ID NO: 1, SEQ ID NO: 3 or SEQ ID NO: 42.

Claim 5 (currently amended): A polypeptide immunogen consisting of the amino acid sequence of SEQ ID NO: 1, 3, ~~7, 17, 20~~[[,]] or 42, each with up to 20 additional amino acids, wherein the up to 20 additional amino acids can be located at the carboxyl or the amino terminus.

Claim 6 (currently amended): The polypeptide immunogen of claim 5 wherein said polypeptide immunogen consists of the amino acid sequence of SEQ ID NO: 1, 3, ~~7, 17, 20~~[[,]] or 42.

Claim 7 (currently amended): An immunogen consisting of an amino acid sequence of either (a) an amino acid sequence at least 90% identical to SEQ ID NO: 1 identical to SEQ ID NO: 3 or differing from SEQ ID NO: 3 by up to 16 amino acid alterations; or (b) a fragment of (a), wherein said fragment comprises SEQ ID NO: 1 or differs from SEQ ID NO: 1 by up to 16 amino acids alterations; and one or more additional regions or moieties covalently joined to said sequence at the carboxyl terminus or the amino terminus, wherein each of said one or more additional regions or moieties is independently selected from a region or moiety having at least

one of the following properties: enhances the immune response, facilitates purification, or facilitates polypeptide stability.

Claim 8 (currently amended): A composition able to induce a protective immune response against *S. aureus* in a patient comprising an immunologically effective amount of a purified polypeptide immunogen that provides protective immunity against said *S. aureus* and a pharmaceutically acceptable carrier, wherein the polypeptide immunogen consists of either (a) an amino acid sequence at least 94% identical to SEQ ID NO: 3 ~~[[.]]~~ or differing from SEQ ID NO: 3 by up to 16 amino acids alterations; or (b) a fragment of said amino acid sequence at least 94% identical to SEQ ID NO: 3, where said fragment comprises a sequence identical to SEQ ID NO: 1 or differing from SEQ ID NO: 1 by up to 16 amino acids alterations, ~~an amino acid sequence at least 94% identical to SEQ ID NO: 1~~ ~~[[.]]~~

Claim 9 (currently amended): The composition of claim 8, wherein said purified polypeptide immunogen provides protective immunity against *S. aureus* COL, ~~composition further comprises an adjuvant~~ ~~[[.]]~~

Claims 10-32 (canceled):

Claim 33 (currently amended): ~~The polypeptide immunogen of claim 1~~ composition of claim 9, wherein said polypeptide immunogen consists of either (a) an amino acid sequence identical to SEQ ID NO: 3 or differing from SEQ ID NO: 3 by up to 15 amino acids alterations; or (b) a fragment of said amino acid sequence, wherein said fragment comprising a sequence identical to SEQ ID NO: 1 or differing from SEQ ID NO: 1 by up to 15 amino acids alterations. ~~is SEQ ID NO: 1 or differs from SEQ ID NO: 1 by up to 25 amino acid alterations~~ ~~[[.]]~~

Claim 34 (currently amended): ~~The polypeptide immunogen of claim 33~~ composition of claim 9, wherein said polypeptide immunogen consists of either (a) an amino acid sequence identical to SEQ ID NO: 3 or differing from SEQ ID NO: 3 by up to 10 amino acids alterations; or (b) a fragment of said amino acid sequence, wherein said fragment comprises a sequence identical to SEQ ID NO: 1 or differing from SEQ ID NO: 1 ~~is SEQ ID NO: 1 or differs from SEQ ID NO: 1 by up to 10 amino acid alterations.~~

Claim 35 (currently amended): The ~~polypeptide immunogen of claim [[34]]~~ composition of claim 9, wherein said polypeptide immunogen consists of either (a) an amino acid sequence identical to SEQ ID NO: 3 or differing from SEQ ID NO: 3 by up to 5 amino acids alterations; or (b) a fragment of said amino acid sequence, wherein said fragment comprises a sequence identical to SEQ ID NO: 1 or differing from SEQ ID NO: 1 is SEQ ID NO: 1 or differs from SEQ ID NO: 1 by up to 5 amino acid alterations.

Claim 36 (previously presented): The polypeptide immunogen of claim 6, wherein said polypeptide immunogen is SEQ ID NO: 1.

Claim 37 (canceled):

Claim 38 (currently amended): The composition of claim 8, wherein said composition further comprises an adjuvant and said polypeptide immunogen is substantially purified~~and said patient is a human.~~

Claim 39 (currently amended): The composition of claim ~~89~~ 33, wherein said composition further comprises an adjuvant and said polypeptide immunogen is substantially purified~~SEQ ID NO: 1 or differs from SEQ ID NO: 1 by up to 25 amino acid alterations.~~

Claim 40 (currently amended): The composition of claim ~~39~~ 33, wherein said composition further comprises an adjuvant and said polypeptide immunogen is substantially purified~~and said patient is a human.~~

Claim 41 (currently amended): The composition of claim ~~83~~ 34, wherein said composition further comprises an adjuvant and said polypeptide immunogen is substantially purified~~SEQ ID NO: 1 or differs from SEQ ID NO: 1 by up to 10 amino acid alterations.~~

Claim 42 (currently amended): The composition of claim ~~41~~35, wherein said composition further comprises an adjuvant and said polypeptide immunogen is substantially purified~~and said patient is a human~~.

Claim 43 (currently amended): The composition of claim ~~8~~9, wherein said polypeptide immunogen is SEQ ID NO: 1 or differs from SEQ ID NO: 1 by up to 5 amino acid alterations.

Claim 44 (currently amended): The composition of claim 43, wherein said composition further comprises an adjuvant and said polypeptide immunogen is substantially purified~~and said patient is a human~~.

Claim 45 (previously presented): The composition of claim 8, wherein said polypeptide immunogen is SEQ ID NO: 1.

Claim 46 (currently amended): The composition of claim 45, wherein said composition further comprises an adjuvant and said polypeptide immunogen is substantially purified~~and said patient is a human~~.

Claim 47 (previously presented): The composition of claim 8, wherein said polypeptide immunogen consists of the amino acid sequence of SEQ ID NO: 1, 3, 7, 17, 20, or 42, each with up to 20 additional amino acids, wherein the up to 20 additional amino acids can be located at the carboxyl or the amino terminus.

Claim 48 (previously presented): The composition of claim 47, wherein said polypeptide immunogen consists of the amino acid sequence of SEQ ID NO: 1, 3, 7, 17, 20, or 42.

Claim 49 (currently amended): The immunogen of claim 7, wherein said amino acid sequence is SEQ ID NO: 1 or differs from SEQ ID NO: 1 by up to ~~25~~15 amino acid alterations and said immunogen is protective against *S. aureus* COL.

Claim 50 (previously presented): The immunogen of claim 49, wherein said amino acid sequence is SEQ ID NO: 1 or differs from SEQ ID NO: 1 by up to 10 amino acid alterations.

Claim 51 (previously presented): The immunogen of claim 50, wherein said amino acid sequence is SEQ ID NO: 1 or differs from SEQ ID NO: 1 by up to 5 amino acid alterations.

Claim 52 (previously presented): The immunogen of claim 51, wherein said amino acid sequence is SEQ ID NO: 1.

Claim 53 (previously presented): The immunogen of claim 7, wherein said amino acid sequence consists of SEQ ID NO: 1, 3, 7, 17, 20, or 42, each with up to 20 additional amino acids, wherein the up to 20 additional amino acids can be located at the carboxyl or the amino terminus.

Claim 54 (previously presented): The immunogen of claim 53, wherein said amino acid sequence consists of SEQ ID NO: 1, 3, 7, 17, 20, or 42.

Claim 55 (new): The composition of claim 8, wherein said polypeptide immunogen consists of either (a) an amino acid sequence at least 99% identical to SEQ ID NO: 3, or (b) a fragment of said amino acid sequence, wherein said fragment comprises a sequence at least 99% identical to SEQ ID NO: 1.

Claim 56 (New): The composition of claim 55, further comprising an adjuvant.

Claim 57 (new): The immunogen of claim 7, wherein said immunogen provides protection against *S. aureus* COL and said polypeptide immunogen consists of either (a) an amino acid sequence identical to SEQ ID NO: 3 or differing from SEQ ID NO: 3 by up to 16 amino acids alterations, or (b) a fragment of said amino acid sequence, wherein said fragment comprises a sequence identical to SEQ ID NO: 1 or differing from SEQ ID NO: 1 by up to 16 amino acids alterations.

Claim 58 (new): The immunogen of claim 57, wherein said polypeptide immunogen consists of either (a) an amino acid sequence identical to SEQ ID NO: 3 or differing from SEQ ID NO: 3 by up to 10 amino acids alterations, or (b) is a fragment of said amino acid sequence, wherein said fragment comprises a sequence identical to SEQ ID NO: 1 or differing from SEQ ID NO: 1 by up to 10 amino acids alterations.

Claim 59 (new): The immunogen of claim 58, wherein said polypeptide immunogen consists of either (a) an amino acid sequence identical to SEQ ID NO: 3 or differing from SEQ ID NO: 3 by up to 5 amino acids alterations, or (b) is a fragment of said amino acid sequence, wherein said fragment comprises a sequence identical to SEQ ID NO: 1 or differing from SEQ ID NO: 1 by up to 5 amino acids alterations.

Claim 60 (new): The polypeptide immunogen of claim 1, wherein said *S. aureus* is COL.

Claim 61 (new): A purified polypeptide immunogen able to provide protection against *S. aureus* COL consisting of either (a) an amino acid sequence identical to SEQ ID NO: 3 or differing from SEQ ID NO: 3 by up to 16 amino acids alterations, or (b) a fragment of said amino acid sequence, wherein said fragment comprising a sequence identical to SEQ ID NO: 1 or differing from SEQ ID NO: 1 by up to 16 amino acids alterations.

Claim 62 (new): The polypeptide of claim 61, wherein polypeptide immunogen consists of either (a) an amino acid sequence identical to SEQ ID NO: 3 or differing from SEQ ID NO: 3 by up to 10 amino acids alterations, or (b) a fragment of said amino acid sequence, wherein said fragment comprises a sequence identical to SEQ ID NO: 1 or differing from SEQ ID NO: 1 by up to 10 amino acids alterations.

Claim 63 (new): The polypeptide of claim 62, wherein polypeptide immunogen consists of either (a) an amino acid sequence identical to SEQ ID NO: 3 or differing from SEQ ID NO: 3 by up to 5 amino acids alterations, or (b) a fragment of said amino acid sequence, wherein said

Serial No.: 10/564,458
Case No.: 21569YP

fragment comprises a sequence identical to SEQ ID NO: 1 or differing from SEQ ID NO: 1 by up to 5 amino acids alterations.